CLAIMS

1. Bone anchoring element comprising a tubular implant to be inserted into bone tissue for anchoring a prosthetic component (TK) located outside the bone, a component which is open at one end thereof intended to be inserted into the bone tissue while the other end intended to be directed towards portions located externally of the bone tissue is closed by a compact impermeable end wall portion with attachment for the prosthetic component on the outside thereof the lumen extending from the open end through the total implant to the end wall portion, wherein the implant has a compact impermeable side wall with a stop mark for defining an end position for the implant at insertion into the bone tissue, and that the lumen of the implant also includes a cavity in the end wall portion open towards the lumen.

10

15

- Bone anchoring element according to claim 1
 wherein the stop mark is formed by a shoulder, which can be
 engaged with the bone tissue.
 - 3. Bone anchoring element according to claim 2 wherein the shoulder is formed by the end wall portion.
- 25 **4.** Bone anchoring according to claim 3, wherein the shoulder is formed at said one end.
- 5. Bone anchoring element according to claim 1, wherein the side wall forms threads on the outside or in-30 side thereof.
 - **6.** Bone anchoring element according to claim 5 wherein the have double entrances.

- 7. Bone anchoring element according to claim 1 wherein the outer and/or inner surface of the side wall has micro topography.
- 8. Bone anchoring element according to claim 1 wherein the total potential bone contact surface is at least double the size of a compact implant having the same external measures.
- 9. Bone anchoring element according to claim 1 which after insertion to the stop mark occupies a bone volume which is maximum 30 % of the bone volume occupied by a compact implant of corresponding length (height) and diameter.
- 10. Bone anchoring according to claim 1 wherein the length (height) of the implant is substantially equal to the diameter.
- 11. Bone anchoring element according to claim 1
 20 wherein the implant has a diameter, which is larger than
 its length (height).